pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

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Dear Evelyn:

Thank you for your comments regarding the draft 2015 Assessment Methodology recently released by the Department of Environmental Protection (DEP). DEP appreciates EPA Region III's support of our effort to develop and refine our various monitoring and assessment protocols. Below are responses to your comment letter.

ASSESSMENT AND LISTING METHODOLOGY FOR INTEGRATED WATER QUALITY MONITORING AND ASSESSMENT REPORT

1. DEP evaluates all lines of relevant evidence and applies the concept of independent applicability when determining the attainment status of a waterbody. However, there may be instances when a weight of evidence approach is best such as when the evidence for impairment may be weak in comparison for attainment. These instances are few and as a general rule independent applicability is applied.

2. DEP continues to make progress towards assessment methods for large non-wadeable waters. Large rivers are complex and require labor intensive sampling methodologies. Over the past few years DEP has identified and filled in many of the data gaps required to develop a methodology. The collection efforts and data analysis will continue through 2016. The target is to include one or more non-wadeable protocols in the Assessment Methodologies prior to the 2018 Integrated Report.

3. All waters currently listed and those proposed for listing on Category 4b in 2016 have enforceable regulatory mechanisms designed to achieve water quality standards. DEP has implemented procedural changes so that 4b listed waters are assessed one to two years after technological upgrades and changes are completed to determine if the implementations are successful.

NUTRIENT IMPACT ASSESSMENT PROTOCOL FOR WADEABLE STREAMS

Based on comments received, DEP determined the protocol needs additional refinement and data collection. The additional data will be collected through 2016. As a result, the nutrient protocol will not be included in the final 2015 Assessment Methodology. We appreciate your comments concerning the protocol, and they will be taken into consideration as DEP refines the protocol. EPA will be provided an opportunity to comment when the new protocol is proposed.

RECREATIONAL USE ASSESSMENT METHODOLOGY BACTERIOLOGICAL SAMPLING PROTOCOL

1. Water contact recreation occurs during lower flows typically close to base flow, making this the critical time period to monitor. Primary water contact will not occur during dangerous high flows. If DEP observes chronic violations at base flow then an effort is made to collect at least one sample following moderate rainfall (approximately 0.25 to 0.5).

LAKE ASSESSMENT PROTOCOL

1. EPA made a significant investment in the lake nutrient criteria development process through the N-STEPS evaluation of DEP lake data – primarily, the water column data. There were several important outcomes from that process, possibly the most important being the assemblage of the lake data into a single, comprehensive geodatabase. The report was technically sound and well done, and explored the relationship between nutrients and response variables such as chlorophyll-a and Secchi depth. DEP is working to fill some data gaps necessary to complete a lake protocol. Information from N-STEPS will be integrated into the final protocol as appropriate.

2. DEP has developed a HABs monitoring protocol for Lake Erie and has been working towards adapting that method to inland lakes and streams. DEP has not observed many algal blooms on surface waters in the past decade which has limited our ability to develop methods. In addition, most PA surface water withdrawals are in deep waters and face minimal threat from algal toxins.

Sincerely,

Rodney Kime

Rodney Kime
Environmental Program Manager
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